

CARYA ALBA PROPOSED AS NOMEN AMBIGUUM

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THE NAME *Carya alba* was first published by Nuttall as one of the species of his new genus *Carya* (Gen. N. Am. Pl. 2: 220. 1818) without citation of the basonym, but it was apparently based either on *Juglans alba* L. (Sp. Pl. 997. 1753) or more likely on *J. alba* Michaux (Fl. Bor.-Am. 2: 192. 1803), since he uses it in the restricted sense of the latter author. *Juglans alba* of Linnaeus comprises two species, as his citations show; those referring to Gronovius, Parkinson and Catesby represent, at least partly, the species called *J. tomentosa* by Poiret (1798) and by Michaux (1803), while the reference to Plukenet may represent the species called *J. ovata* by Miller (1768). These two epithets were transferred to *Carya* as *C. tomentosa* by Nuttall (1818) and as *C. ovata* by K. Koch (1869). Many authors, however, trying to retain the original epithet "*alba*," applied it differently to one of the two species included by Linnaeus in his *J. alba*. Crantz (1766) and Miller (1768) were the first ones definitely to restrict *J. alba* of Linnaeus to one species; Crantz by citing only Catesby as the type of *J. alba*, and Miller by separating the two species chiefly involved in the Linnaean *J. alba*. Of the authors who followed Miller in keeping the epithet *alba* for the species representing *C. tomentosa* (Poir.) Nutt. may be cited: K. Koch (1869) and Sargent (1922) as *Carya alba*; Britton (1888) and Sargent (1895) as *Hicoria alba*; Sargent (1889) as *Hicorius albus*. Of those authors who followed Michaux (1803) in using the epithet *alba* for the species representing *C. ovata* (Mill.) K. Koch may be cited: Rafinesque (1808) as *Scoria alba*; Nuttall (1818), Emerson (1846 and 1875), C. de Candolle (1864) and Engler (1887), as *C. alba*.

It is probably correct to consider the references to Parkinson, Catesby and Gronovius as representing the type of *Juglans alba* L. and therefore, in transferring the species to *Carya*, it should be named *C. alba*, but from the remarks above and the synonymy cited below, it appears that evidently the majority of authors followed Michaux and applied the epithet *alba* to the species called *C. ovata* (Mill.) K. Koch.

There also arises the question whether the name *C. alba* (Mill.) K. Koch (1869) should not be considered a later homonym of *C. alba* Nuttall (1818) and Emerson (1846) and be rejected according to Articles 54 and 61 of the Rules, or whether it should be called a misidentification. The latter assumption would presuppose typification of *J. alba* L., which can hardly be done with certainty, since the name is based not on herbarium specimens but upon insufficient descriptions by previous authors based chiefly on characters of the nut. For the same reason one can hardly accept *J. rubra* Gaertn. (1791) as validly published, since description and figure are based solely on the nut and would not constitute valid publication according to Art. 43; it should be classed as a *nomen subnudum* and rejected, otherwise it would supersede *J. tomentosa* Poir. of 1798. It therefore seems advis-

able, in order to avoid confusion and ambiguity through the use of the name *Carya alba*, to declare *Carya alba* a *nomen ambiguum* and to accept the two names *C. tomentosa* (Poir.) Nutt. and *C. ovata* (Mill.) K. Koch as the correct names for the two species involved, as has already been done by Rehder (1940) and L. H. Bailey (1941).

The two accepted names with their synonymy are given below, where complete citations of the names referred to in the discussion above will be found.

Carya tomentosa (Poir.) Nuttall, Gen. N. Am. Pl. 2: 221 (1818). — Emerson, Rep. Trees Shrubs Mass. 194, *t.13* (1846); ed. 4, 1: 222, *t.* (1875). — C. de Candolle in De Candolle, Prodr. 16,2: 143 (1864). — Engler in Nat. Pflanzenfam. III. 1: 25 [1887]. — Rehder, Man. Cult. Trees Shrubs, ed. 2, 123 (1940). — Bailey, Hortus Secund. 145 (1941).

Juglans alba Linnaeus, Sp. Pl. 997 (1753), p. p. — Crantz, Inst. Rei Herb. 1: 157 (1766). — Miller, Gard. Dict., ed. 7, *J.* no.4 (1768). — Willdenow, Sp. Pl. 4: 457 (1805).

Juglans rubra Gaertner, Fruct. Sem. 2: 51, *t.89*, *fig. k.* (1791), nom. subnud.

Juglans tomentosa Poiret in Lamarck, Encycl. Méth. Bot. 4: 504 [1798]. — Michaux, Fl. Bor.-Am. 2: 192 (1803). — Michaux f., Hist. Arb. For. Am. Sept. 1: 184, *t.6* (1810).

Scoria tomentosa Rafinesque in Med. Repos. New York hex. 2, 5: 352 (1808).

Carya tomentosa β *maxima* Nuttall, Gen. N. Am. Pl. 2: 221 (1818).

Hicoria maxima (Nutt.) Rafinesque, Alsogr. Am. 67 (1838).

Carya alba (Mill.) K. Koch, Dendr. 1: 596 (1869). — Sargent, Man. Trees N. Am. ed. 2, 188, *fig. 178* (1922). — Non Nuttall (1818), nec Emerson (1846).

Hicoria alba (L.) Britton in Bull. Torrey Bot. Club, 15: 283 (1888). — Sargent, Silva N. Am. 7: 153, *t.346,347* (1895).

Hicoria alba var. *maxima* Britton, l. c. (1888).

Hicorius albus (L.) Sargent in Gard. & Forest, 2: 460 (1889).

Carya ovata (Mill.) K. Koch, Dendr. 1: 59 (1869). — Sargent, Man. Trees N. Am. ed. 2, 183, *fig.174* (1922).

Juglans alba Linnaeus, Sp. Pl. 997 (1753), p. p. — Michaux, Fl. Bor.-Am. 2: 193 (1803). — Pursh, Fl. Am. Sept. 2: 637 (1814).

Juglans ovata Miller, Gard. Dict., ed. 8, *J.* no. 6 (1768).

Juglans alba ovata Marshall, Arbust. Am. 69 (1785).

Juglans compressa Gaertner, Fruct. Sem. 2: 151, *t.89*, *fig. i* (1791), nom. subnud. — Willdenow, Sp. Pl. 4: 458 (1805).

Juglans latifolia Poiret in Lamarck, Encycl. Méth. Bot. 4: 503 [1798].

Juglans obcordata Poiret in Lamarck, op. cit. 504 [1798].

Scoria alba Rafinesque in Med. Repos. New York, hex. 2, 5: 352 (1808), nom.

Juglans squamosa Michaux f., Hist. Arb. Am. 1: 190, *t.7* (1810). — Nuttall, N. Am. Sylva, 1: 80, *t.36* (1841). — Non Poiret [1798] = *J. glabra* (Mill.) Sweet.

Carya alba Nuttall, Gen. N. Am. Pl. 2: 221 (1818), nom. — Elliott, Sketch Bot. S. Carol. 2: 624 (1824). — Emerson, Rep. Trees Shrubs Mass. 191, *t.12* (1846); ed. 4, 1: 217, *t.* (1875). — C. de Candolle in De Candolle, Prodr. 16,2: 142 (1864). — Engler in Nat. Pflanzenfam. III. 1: 25 [1887], nom. in obs.

Hicoria ovata Britton in Bull. Torrey Bot. Club, 15: 283 (1888). — Sargent, Silva N. Am. 7: 153, *t.346,347* (1895).

Hicorius ovatus Sargent in Gard. & Forest, 2: 460 (1889).

Scoria ovata Macmillan, Metasperm. Minnesota, 178 (1892).